UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,232	01/09/2001	Khiem Le	59864.00633	6982

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EXAMINER
CORRIELUS, JEAN M

ART UNIT	PAPER NUMBER
2162	

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/756,232	LE ET AL.
		Examiner	**Art Unit**	
		Jean M. Corrielus	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>7/25/06</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19,21-40 and 42-52* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19,21-40 and 42-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the amendment filed on July 25, 2006, in which claims

1-19, 21-40 and 42-52 are presented for examination.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-19, 21-40 and 42-50 have been considered

but are moot in view of the new ground(s) of rejection necessitated by amendment.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

4.   Claims 1-19 and 21-31 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter, specifically, as directed to an abstract idea.

Claims 1-19 and 21-31 in view of **MPEP section 2106 IV.B.2. (b)** define non-statutory

processes because they merely manipulate an abstract idea. More specifically, claims 1, and 19

recite a method comprising communicating information; comparing a current item list ,

determining a type and using the type of classification". Such limitations of the claims are just an

abstract idea without product a concrete result and they are not embedded in the computer

system to form the basis of 101 statutory. Actually, no post computer process activity and no

physical transformation are found in the claims. Therefore, claims 1-19 and 21-31 are directed

to an abstract idea that is not tied to a technological art, environment or machine which would

produce a concrete and useful result to form the basis of statutory subject matter under 35 U.S.C.

101.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7.   Claims 1, 2, 14, 15, 19, 21, 27, 28, 33-52 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Holmes US Patent no. 5,864,860 and Yoshimura et al., (hereinafter

"Yoshimura") US Patent no. 7,061,936.

As to claims 1, 19, 32, 40 and 51-52, Holmes discloses a system and method for compressing a

data sequence having a plurality of records, wherein each record has a plurality of fields with

each field beings classified to contain data items. In particular, Holmes discloses the claimed

"classifying at least one item of a current list containing a plurality of items by comparing the

current list with a reference list containing a plurality of items by comparing the current list with

a reference list containing a plurality of items" (col.3, lines 2-10; col.4, lines 21-25; col.4, lines

37-43); "based upon the classifying of the at least one item of the current list forming a

compressed list including said at least one item" (col.4, lines 13-16, lines 44-45, lines 54-56) and

"transmitting said compressed list" (col.4, lines 56-59). However, Holmes does not explicitly

determine a type of classification based on said comparing and using the determined type to

control how the information is communicated.

On the other hand, Yoshimura disclose an analogous system for transmitting and receiving

packets among a plurality of data terminal for transmission. In particular, Yoshimura discloses

the claimed features "classifying at least one item of a current list containing a plurality of items

by comparing the current list with a reference list containing a plurality of items by comparing

the current list with a reference list containing a plurality of items"; "based upon the classifying

of the at least one item of the current list forming a compressed list including said at least one

item"; and "determine a type of classification based on said comparing and using the determined

type to control how the communicating the information" when the communication apparatus on

the sender node recognizes a change, the communication apparatus produces a header

compressed packet containing type-1 header or type-2 header to transfer to new difference to the

receiver node, when the difference in some field of header between the packets is changed, one

or more packets prior to the packet to be compressed are selected as reference packets, wherein

the reference packet, which is selected is compared with each other and then different lower bits

are transmitted (col.9, lines18-30; col.18, lines 53-67; col.19, lines 3-62). It would have been

obvious to one having ordinary skill in the art at the time the invention was made to combine the

teachings of the cited references, wherein the method of compressing the data sequence of

Holmes would incorporate the use of determine a type of classification based on said comparing

and using the determined type to control how the communicating the information, in the same

conventional manner as Yoshimura. One having ordinary skill in the art at the time the invention

was made would have found it motivate to use the determined type of classification for the

purpose of efficiently improving effect on the compression, thereby enabling a reduction in the

amount of data to be transferred

8.   Claims 1, 2, 14, 15, 19, 21, 27, 28, 33-52 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Holmes US Patent no. 5,864,860 and Le et al., (hereinafter "Le") US Patent

no. 6,882,637.

As to claims 1, 19, 32, 40 and 51-52, Holmes discloses a system and method for compressing a

data sequence having a plurality of records, wherein each record has a plurality of fields with

each field beings classified to contain data items. In particular, Holmes discloses the claimed

"classifying at least one item of a current list containing a plurality of items by comparing the

current list with a reference list containing a plurality of items by comparing the current list with

a reference list containing a plurality of items" (col.3, lines 2-10; col.4, lines 21-25; col.4, lines

37-43); "based upon the classifying of the at least one item of the current list forming a

compressed list including said at least one item" (col.4, lines 13-16, lines 44-45, lines 54-56) and

"transmitting said compressed list" (col.4, lines 56-59). However, Holmes does not explicitly

determine a type of classification based on said comparing and using the determined type to

control how the information is communicated.

On the other hand, Le discloses an analogous system for transmitting and receiving packets among a plurality of data terminal for transmission. In particular, Le discloses the claimed features "classifying at least one item of a current list containing a plurality of items by comparing the current list with a reference list containing a plurality of items by comparing the current list with a reference list containing a plurality of items"; "based upon the classifying of the at least one item of the current list forming a compressed list including said at least one item"; and "determine a type of classification based on said comparing and using the determined type to control how the communicating the information" when the communication apparatus on the sender node recognizes a change, the communication apparatus produces a header compressed packet containing type-1 header or type-2 header to transfer to new difference to the receiver node, when the difference in some field of header between the packets is changed, one or more packets prior to the packet to be compressed are selected as reference packets, wherein the reference packet, which is selected is compared with each other and then different lower bits are transmitted (col.1, lines 35-67; col.2, lines 35-42; col.4, lines 35-65; col.5, lines 25-53; col.28, lines 60-67; col.38, lines 26-45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of the cited references, wherein the method of compressing the data sequence of Holmes would incorporate the use of determine a type of classification based on said comparing and using the determined type to control how the communicating the information, in the same conventional manner as Le One having ordinary skill in the art at the time the invention was made would have found it motivate to use the determined type of classification for the purpose of efficiently improving effect on the compression, thereby enabling a reduction in the amount of data to be transferred.

As to claims 2-4, 14-18, 21-24, 30, 31, 33-39 and 42-50, Holmes and Yoshimura disclose the

substantially the invention as claimed. In addition, Homes discloses the claimed "wherein said

compressed list includes information regarding a difference between a current item list and a

reference item list" (col.3, lines 7-10; col.4, lines 37-50).

9.   Claims 5-13 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Holmes US Patent no. 5,864,860 and Yoshimura et al., (hereinafter "Yoshimura") US Patent no.

7,061,936 as applied to claims 1-4, 14-19, 21-24, 30-40 and 42-49 above, and further in view of

Svanbro et al (hereinafter Svanbro") US Patent no. 6,535,925.

As to claim 25, Holmes and Svanbro disclose substantially the invention as claimed. However,

Holmes does not explicitly disclose the use of encoding the information regarding said difference

prior to sending said information from said first entity to said second entity. On the other hand,

Svanbro discloses the claimed feature "encoding the information regarding said difference prior

to sending said information from said first entity to said second entity"(col.5, line 15-col.8, line

63). Therefore, it would have been obvious to one having ordinary skill in the art combine the

teachings of cited references, wherein the database server, provided therein (see Holmes' fig.1)

would incorporate the use of a robust and efficient compression of list of items, in the same

conventional manner as discloses by Svanbro. One having ordinary skill in the art would have

found it obvious to utilize such a combination for the purpose of efficiently improving effect on

the compression, thereby enabling a reduction in the amount of data to be transferred.

As to claims 5 and 26, Holmes and Svanbro disclose substantially the invention as claimed.
However, Holmes does not explicitly disclose the claimed wherein encoding the information
comprises encoding information regarding a position of a newly added item to said reference
item list. On the other hand, Svanbro discloses the claimed feature "wherein encoding the
information comprises encoding information regarding a position of a newly added item to said
reference item list" (col.5, line 15-col.8); and "encoding information regarding which item in
said reference item list is not in said current item list" (col.5, line 15-col.8, line 63). Therefore, it
would have been obvious to one having ordinary skill in the art combine the teachings of cited
references, wherein the database server, provided therein (see Holmes' fig.1) would incorporate
the use of a robust and efficient compression of list of items, in the same conventional manner as
discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize
such a combination for the purpose of efficiently improving effect on the compression, thereby
enabling a reduction in the amount of data to be transferred.

As to claims 6 and 27, Holmes and Svanbro disclose substantially the invention as claimed.
However, Holmes does not explicitly disclose the claimed wherein encoding the information
comprises encoding information regarding which item in said reference item list is not in said
current item list. On the other hand, Svanbro discloses the claimed feature "wherein encoding the
information comprises encoding information regarding which item in said reference item list is
not in said current item list"(col.5, line 15-col.8, line 63). Therefore, it would have been obvious
to one having ordinary skill in the art combine the teachings of cited references, wherein the
database server, provided therein (see Holmes' fig.1) would incorporate the use of a robust and

efficient compression of list of items, in the same conventional manner as discloses by Svanbro.
One having ordinary skill in the art would have found it obvious to utilize such a combination
because that would provide Holmes' system the enhanced capability of efficiently compressing a
header of a real-time communication packet.

As to claims 7-11 and 28, Holmes and Svanbro disclose substantially the invention as claimed.
However, Holmes does not explicitly disclose the claimed wherein encoding the information
comprises encoding information regarding content of at least one item in said reference item list.
On the other hand, Svanbro discloses the claimed feature "wherein encoding the information
comprises encoding information regarding content of at least one item in said reference item
list"(col.5, line 15-col.8, line 63). Therefore, it would have been obvious to one having ordinary
skill in the art combine the teachings of cited references, wherein the database server, provided
therein (see Holmes's fig.1) would incorporate the use of a robust and efficient compression of
list of items, in the same conventional manner as discloses by Svanbro. One having ordinary skill
in the art would have found it obvious to utilize such a combination for the purpose of efficiently
improving effect on the compression, thereby enabling a reduction in the amount of data to be
transferred

As to claim 29, Holmes and Svanbro disclose substantially the invention as claimed. However,
Holmes does not explicitly disclose the claimed wherein said information further comprises a
type of encoding. On the other hand, Svanbro discloses the claimed feature "wherein said
information further comprises a type of encoding" (col.5, lines 15-col.6, line 65). Therefore, it

would have been obvious to one having ordinary skill in the art combine the teachings of cited

references, wherein the database server, provided therein (see Holmes's fig.1) would incorporate

the use of a robust and efficient compression of list of items, in the same conventional manner as

discloses by Svanbro. One having ordinary skill in the art would have found it obvious to utilize

such a combination for the purpose of efficiently improving effect on the compression, thereby

enabling a reduction in the amount of data to be transferred.

Conclusion

10.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this
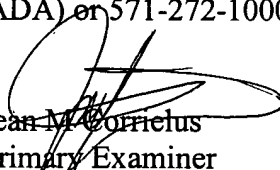
final action.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032.
The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the
organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent
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Jean M. Corrielus
Primary Examiner
Art Unit 2162

October 12, 2006